



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4077D BYPASS RATIO: 6.6
 UNIQUE ID NUMBER: 3PW064 PRESSURE RATIO (π_{00}): 32.8
 COMBUSTOR: RATED THRUST (F_{00}) (kN): 343.0
 ENGINE TYPE: TF

REGULATORY DATA **** DATA SUPERSEDED **** SEE FOLLOWING UID FOR REVISED DATA: **10PW097**

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	8.1	45.2	72.8	4.8
AS % OF ORIGINAL LIMIT	41.3	38.3	68.9	28.4
AS % OF CAEP/2 LIMIT (NO _x)			86.1	
AS % OF CAEP/4 LIMIT (NO _x)			100.2	
AS % OF CAEP/6 LIMIT (NO _x)			112.7	
AS % OF CAEP/8 LIMIT (NO _x)			130.5	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	3.082	0.03	0.22	44.74	3.8
CLIMB OUT	85	2.2	2.507	0.04	0.25	35.82	2.9
APPROACH	30	4.0	0.835	0.07	0.60	12.10	0.9
IDLE	7	26.0	0.244	4.66	32.62	3.83	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1041	1805	12648	21528	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				5.3	36.8	62.8	3.8
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.1-101.6
TEMPERATURE (K)	292.8-302.6
ABS HUMIDITY (kg/kg)	0.0097-0.0112

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: East Hartford, CT
 TEST DATES: 15/06/1996-16/06/1996

REMARKS

1. Data from Report PWA-6678

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)